MANUFACTURING EXTENSION PARTNERSHIP Success Stories from the Field

Placer Dome Turquoise Ridge Joint Venture

Nevada Management Assistance Partnership

Mining Companies Save \$50,000 with MAP Help

Client Profile:

Turquoise Ridge Joint Venture, a joint venture between Barrick Gold Corp. and Newmont Mining, is an underground gold mine located in Golconda, Nevada. Operations at Turquoise Ridge consist of two underground mines, the Turquoise Ridge mine and the Getchell mine. Turquoise Ridge Joint Venture employs 250 people.

Situation:

Nevada, globally, is the third largest gold producer. Gold mines in the State employ in excess of 11,000 people. The recent gold boom, which began in the early 1960s, has largely seen extraction from surface open pit mines. As extraction matures at an operation, deeper depths are reached in the pits, and it becomes increasingly difficult to maintain stable pit slopes. Many of the older operations, in the current environment of high gold prices, have moved to underground extraction methods to continue mining.

Over the last 30 to 40 years, hard rock mining in the U.S. has been on the decline. That, combined with the emphasis on lower cost surface extraction methods, has also led to a decline in experienced labor with specific skills applicable to underground mining methods. When the Turquoise Ridge Joint Venture recently began operations, they found it very difficult to secure enough experienced underground miners to meet their demand. In response to the shortage of experienced miners, Turquoise Ridge began their own Miner Training Academy in August of 2004. They began advertising for candidates to enter the academy and employed an intensive screening process focusing on local residents in the pursuit of developing the skilled labor force required to operate effectively underground. The Miner Training Academy curriculum consists of an intensive 12-week program, both in the classroom and in the mine, preparing candidates for work in an underground setting. Students learn how to operate equipment and hand-held jackleg drills, and they learn about blasting, mucking and backfilling, as well as how to mine safely. The mine will spend roughly \$16,000 per student-employee to put them through the academy. The costs include wages for the students and for trainers and the headmaster.

Solution:

The Nevada Management Assistance Partnership (MAP), a NIST MEP network affiliate, introduced mine management to the program, "Train Employees Now" (TEN), with the intention of assisting Turquoise Ridge Joint Venture in their efforts to train and meet the skilled labor needs for underground mines in Nevada. This program is an incentive program available through the State of Nevada Commission on Economic Development (NV CED) for companies that move to, or expand in Nevada. The application that followed was submitted in collaboration with Great Basin College of Elko, Nevada, and the Humboldt Development Authority based in Winnemucca, Nevada.



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Results:

- * Awarded a NV CED \$60,000 training grant, the first mine expansion project in Nevada to receive a TEN award, in 2004.
- * Upgraded skill levels of 60 employees.
- * Awarded certificates to those completing Miner Training Academy Program.
- * Awarded \$50,000 phase two TEN award in 2006 to offset training costs for 50 new miners.
- * Anticipated increase in production, continued growth, and improvement of technical skills of the labor force.

Testimonial:

"MAP's help was invaluable. They contacted us initially regarding the program and then led us through the grant process. It was a great cooperative effort that ultimately resulted in approval of our application by the Nevada Commission on Economic Development."

John Mansanti, Mine General Manager

